

PAGE REPLACEMENT WITH A RE-REFERENCE INDICATOR
ABSTRACT

5 A method, apparatus, processor, system, and signal-bearing medium that in an
embodiment determine which page to replace in memory when the memory is full based
on reference and re-reference indicators in page table entries. In an embodiment, a
reference indicator in an entry is set when its associated page is accessed in memory and
the reference indicator was previously clear. The re-reference indicator in an entry is set
when its associated page is accessed and the reference indicator was previously set. Both
10 the reference and re-reference indicators are cleared if their associated page is accessed
and both were previously set. When a new page is accessed and the memory is full, a
page in the memory is not available for replacement if both its reference and its re-
reference indicators are set. Otherwise, the page is available for replacement.